



## Inquiry Starters

Learners explore materials, make observations, and raise questions related to content goals.

### Inquiry Starters

Inquiry Starters are carefully designed activities intended to:

- Engage the learner's curiosity about phenomena related to content goals
- Stimulate a range of questions that learners can pursue in their investigations

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➤ Do You Know Wolves?

➤ Wolf Behavior Matching Cards

➤ Modified KWL → W with Roundtable Classification

➤ READING → Non-fiction text features

➤ WRITING → Common text with topic sentence, supporting details



## Dog-Eared Publications

Nature Publisher for Children

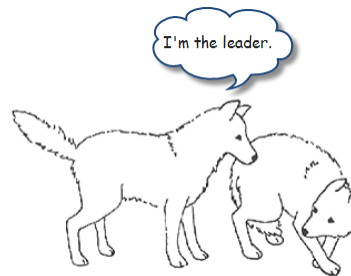
Children's nature books, games, mysteries, puzzles and animal stickers.



Let's play!



This is my territory.



I'm the leader.

I won't fight; I'll obey.

## Questions Worth Thinking About

Teaching Reading in the Content Areas, Rachel Billmeyer



- **Right There Questions**
  - who is, where is, list, what is, name, what kind
- **Think & Search Questions**
  - how did, for what reason, compare, explain
- **On My Own Questions**
  - prove, predict, what if, solve, evaluate

- **Roundtable** - student created categories

- **Nonfiction Text Features** (Stephanie Harvey ~ Nonfiction Matters, Strategies that Work)  
→ fonts & special effects, textual clues (signal words), illustrations & photographs, graphics, text organizers
- **Nonfiction Comprehension Strategies** (Ellin Keene & Susan Zimmerman ~ Mosaic of Thought)  
→ fonts & special effects, textual clues (signal words), illustrations
- **Common Text** - model and apply what we know about nonfiction; practice identifying topic sentences with supporting details.



## Focused Investigation

Learners plan and carry out investigations based on their questions.

### Focused Investigation

Small groups plan and carry out investigations based on questions raised at the Inquiry Starters. Investigations involve the following:

- Interacting with materials
- Making observations
- Proposing tentative explanations
- Making predictions and testing them
- Revisiting questions and explanations in light of new observations
- Recording and representing thinking through writing and drawing

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• My Range exploration → In the News

• Identifying Genre using *Look to the North: A Wolf Pup Diary*

• Reading and note taking → text and electronic sources

## Sharing Understanding

Learners share investigation results with each other to further their understanding of scientific concepts.

### Sharing Understanding

This is an opportunity for learners to examine their ideas and share their experiences. This includes:

- Giving participants time to consolidate ideas and figure out how to communicate what they've learned to others
- Encouraging investigation groups to build upon each others' ideas to arrive at an understanding of key science concepts
- Having facilitators summarize key science concepts by drawing upon ideas presented by investigation groups

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• Sharing, comparing, articulating new questions

• Presentations → acrostic poetry, wolf wonderings,

• Assessment is formative and ongoing

## Collaboration & Engagement



- Creating Responsive Schools
- Vocabulary → intentional and important
- BOTH \* AND → small group work provided focused instruction at the independent reading level as well as practice work as appropriate

## Improving Adolescent Literacy: Effective Classroom and Intervention Practices

[IES Practice Guide]







- Provide explicit vocabulary instruction.
- Provide direct and explicit comprehension strategy instruction.
- Provide opportunities for extended discussion of text meaning and interpretation.
- Increase student motivation and engagement in literacy learning.



<http://i-9490-directors.wikispaces.com/Science+Inquiry>



<http://www.ciese.org/collabprojs.html>

 <table border="1"> <thead> <tr> <th></th> <th>Begin Date</th> <th>End Date</th> </tr> </thead> <tbody> <tr> <td>Fall</td> <td>9/10/08</td> <td>11/28/08</td> </tr> <tr> <td>Spring</td> <td>3/13/09</td> <td>6/5/09</td> </tr> </tbody> </table> <p>Students around the United States and other countries will collect samples from local ponds to answer the question: Are the organisms found in pond water the same all over the world?</p> <p><b>Recommended Grade Levels 1-5 but all are invited to participate</b>  <a href="#">Curriculum Standards</a></p>		Begin Date	End Date	Fall	9/10/08	11/28/08	Spring	3/13/09	6/5/09	 <table border="1"> <thead> <tr> <th></th> <th>Begin Date</th> <th>End Date</th> </tr> </thead> <tbody> <tr> <td>Fall</td> <td>9/15/08</td> <td>11/18/08</td> </tr> <tr> <td>Spring</td> <td>3/16/09</td> <td>5/19/09</td> </tr> </tbody> </table> <p>Students are teaming up around the globe to test fresh water. Join us in this collaborative project, comparing the water quality of your local river, stream, lake or pond with other fresh water sources around the world.</p> <p><b>Recommended Grade Levels 6-8 but all are invited to participate</b>  <a href="#">Curriculum Standards</a></p>		Begin Date	End Date	Fall	9/15/08	11/18/08	Spring	3/16/09	5/19/09
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